

**Finding of No Significant Impact for
Research to Support Reduction of Sea Turtle Bycatch in Domestic and
International Fisheries, Pacific Islands Fisheries Science Center, Bycatch
Reduction Program, Honolulu, Hawaii**

National Marine Fisheries Service

National Oceanic and Atmospheric Administration Administrative Order 216-6 (NAO 216-6) (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 C.F.R. 1508.27 state that the significance of an action should be analyzed both in terms of “context” and “intensity.” Each criterion listed below is relevant in making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ’s context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to jeopardize the sustainability of any target species that may be affected by the action?

Response: No. The proposed research activities are not expected to jeopardize the sustainability of target species affected by the action, specifically threatened and endangered sea turtle populations in the Pacific, Atlantic and Indian Oceans. The goal of the proposed research activities is to generate new data and information on strategies that have the potential of reducing incidental sea turtle bycatch in pelagic longline fisheries, thus supporting the recovery of sea turtle populations worldwide. All field-based research, both domestic and foreign, would involve testing gear or methods that have been indicated to be effective or shown promise for reducing sea turtle bycatch or injury and that have no known mechanism for causing additional harm to turtles or to the environment, but have not been proven to reduce sea turtle bycatch in pelagic longline fishing in a particular region with different fisheries. Since domestic and foreign field studies are coincidental to normal fishing operations, no additional bycatch of sea turtles compared to that experienced using standard gear and operations is anticipated. Effective gear and methodologies would be transferred to cooperating foreign countries and fleets to sea turtle reduce bycatch. As such, the proposed research methods should not affect sustainability.

2) Can the proposed action reasonably be expected to jeopardize the sustainability of any non-target species?

Response: No. The proposed research activities are not expected to jeopardize the sustainability of any non-target species, including marine mammals, fish, or sharks. The risks of incidentally catching a marine mammal in any of the proposed research settings are considered slim, and precautions are in place to avoid such interactions entirely, as explained in section 3.2 of the EA. As such, no adverse impacts of the proposed program are anticipated from the existing and proposed actions on the listed species of marine mammals or species protected by the MMPA. Use of hooks baited with fish rather than squid in research conducted in domestic and foreign longline fleets and transferring this technology to foreign fleets to reduce sea turtle bycatch should decrease the incidental take of sharks as well, especially blue sharks, while maintaining

the catch rate of target species. No other resources are anticipated to be adversely impacted by the existing and proposed research program.

3) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in Fishery Management Plans (FMPs)?

Response: No. Because all of the proposed research activities involve gear or methods used for fishing in the field or transferred to foreign vessels that would be modified, and the number of sea turtle interactions would be less than that caught as bycatch without the modified gear, no impacts to essential fish habitats or associated habitat areas of particular concern would occur. No adverse impacts to any aspect of the water column or any benthic habitats are anticipated because all pelagic longline gear would be used in the water column.

4) Can the proposed action be reasonably expected to have a substantial adverse impact on public health or safety?

Response: No. The action involves research conducted on fishing vessels using technologies that are already authorized and/or in use. The research is conducted on the open ocean far from population centers and does not generate any effects (e.g., pollution plumes) that would migrate to those population centers. As a result, the general public would not be affected in any way by the proposed action. Public health or safety would not be compromised by any aspect of the experimental program.

5) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species?

Response: No. The proposed research activities are not expected to adversely affect endangered or threatened species or critical habitat, as defined under the Endangered Species Act of 1973. The proposed research is anticipated to benefit sea turtles by reducing interactions between turtles and longline fisheries. With respect to protected marine mammals, takes of most species of marine mammals are very rare in longline fishing. Therefore, the existing and proposed actions would have no effect on the listed species of marine mammals or species protected by the Marine Mammal Protection Act.

6) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: No. The proposed research activities are not expected to have substantial impacts on biodiversity or ecosystem function because modification of fishing gear will not affect frequency, intensity, or location of longline fishing activities. Rather, any reduction in sea turtle bycatch that occurs as a result of such gear modifications will support existing ecosystem function. In addition, the biological data collection component of the proposed research deals primarily with individual animals rather than at the ecosystem level. Any sampling or involvement at the ecosystem level is extremely limited in time and scope, such as removal of a

turtle from its natural environment for a short period of time; thus, no adverse impacts are expected to occur.

7) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: No. The intent of the controlled studies on the relative CPUE is to evaluate the effectiveness of the modified gear on catch level compared to the original gear. Foreign fleets would only use the modified gear if it did not affect their revenues. Additionally, gear that does not catch nontarget sea turtles would have more (though not significantly more) hooks available for catching the target fish. Therefore, no adverse impact is expected for the use of modified gear on the economies of foreign nations, nor is the proposed research expected to affect social customs and/or fishing and other related livelihoods of the communities.

8) Are the effects on the quality of the human environment likely to be highly controversial?

Response: No. The proposed research involves the use of existing technologies shown in other studies to reduce interactions between longline fisheries and sea turtles. The research involves modifying in minor ways those fishing activities already permitted and/or regulated. As a result, the research is unlikely to be controversial because it is likely to have positive effects on endangered and threatened sea turtle species.

9) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas?

Response: No. No unique terrestrial areas would be affected by the proposed action. In the Hawaii longline operating area where longline vessels or NOAA research vessels would carry out experiments, the marine resources around the NWHI are protected by a 50 nm longline exclusion area and no impacts to that unique area would be expected. Longline fleets of Brazil and Ecuador fish near, but not in, the identified unique areas of Fernando de Noronha and Atol das Rocas Reserves and the Galapagos Marine Resources Reserve, respectively. None of the experiments involving Brazilian or Ecuadorian fleets would take place in or affect these Reserves.

10) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: No. The proposed research is primarily a continuation of the types of studies that have been done for several years throughout the world. These studies have well-understood and minimal direct effects on the human environment and similarly well-understood and minimal risks.

11) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

Response: No. The past, present, and future research activities are not likely to have had or have any significant adverse cumulative effects on the environment. In particular, they have shown to be effective in reducing sea turtle bycatch without increasing bycatch of other nontarget species and while maintaining or improving catch per unit effort of target fish.

12) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?

Response: No. The proposed research activities would not take place within many miles of any districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places. Similarly, the proposed research activities are not likely to cause loss or destruction of scientific, cultural or historical resources, and any involvement of scientific resources.

13) Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?

Response: No. In the case of the proposed action, the primary vector for the spread of nonindigenous species in would be hull fouling. The proposed action would not involve moving vessels out of their customary sphere of operations and thus this vector would not be active. All gear provided to longline vessels for testing will be new and free of nonindigenous species.

14) Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

Response: No. The proposed action involves research to assess the extent to which new technologies, tested previously in Atlantic longline and other fisheries, can serve to reduce Pacific longline fishery interactions with sea turtles. The basic methods and procedures of this research are widely accepted in the scientific research community and have already been published in peer-reviewed scientific literature. As such, this research continues research already completed and/or parallels research being conducted in other fisheries, and therefore does not represent a precedent for future actions.

15) Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

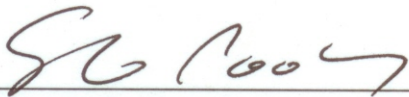
Response: No. All vessels participating in the research would be required to comply with all applicable local, state or Federal laws or regulations for protection of the environment. Hawaii-based longline vessels operate under Federal regulations and guidelines intended to protect sea turtles. NOAA research vessels would also abide by these regulations and guidelines. All vessels participating in the research would also comply with international regulations concerning pollution of the oceans.

16) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: No. The proposed research activities are not expected to have adverse cumulatively significant impacts. The proposed research will take place coincidentally with normal fishing activity and therefore the marginal impact is small. Because a reduction in sea turtle bycatch is likely, any impacts are beneficial. In conjunction with the conservation goals of other agencies, any cumulative impacts of the proposed research activities would likely be beneficial to sea turtle populations.

DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting Environmental Assessment prepared for Research to Support Reduction of Sea Turtle Bycatch in Domestic and International Fisheries, Pacific Islands Fisheries Science Center, Bycatch Reduction Program, Honolulu, Hawaii, it is hereby determined that such research will not significantly impact the quality of the human environment as described above and in the supporting Environmental Assessment. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.



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Date